WHAT IS CLAIMED IS:

1. An antimicrobial suture produced according to the steps of:

positioning a suture and an antimicrobial agent source within a package, said antimicrobial agent being selected from the group consisting of halogenated hydroxyl ethers, acyloxydiphenyl ethers, and combinations thereof; and

subjecting the package, the suture and the antimicrobial agent source to time, temperature and pressure conditions sufficient to vapor transfer an effective amount of the antimicrobial agent from the antimicrobial agent source to the suture, thereby substantially inhibiting bacterial colonization on the suture.

2. An antimicrobial suture assembly having a suture and at least one packaging component produced according to the steps of:

positioning a suture assembly and an antimicrobial agent source within a package, said antimicrobial agent being selected from the group consisting of halogenated hydroxyl ethers, acyloxydiphenyl ethers, and combinations thereof; and

subjecting the package, the suture assembly and the antimicrobial agent source to time, temperature and pressure conditions sufficient to vapor transfer an effective amount of the antimicrobial agent from the antimicrobial agent source to the suture, thereby substantially inhibiting bacterial colonization on the suture assembly.

3. An antimicrobial packaged medical device produced according to the steps of:

positioning a medical device and an antimicrobial agent source within a package comprising an inner surface, said antimicrobial agent being selected from the group consisting of halogenated hydroxyl ethers, acyloxydiphenyl ethers, and combinations thereof; and

subjecting the package, the antimicrobial agent source and the medical device to time, temperature and pressure conditions sufficient to vapor transfer at least an effective amount of the antimicrobial agent from the antimicrobial agent source to inner surface of the package and the medical device, thereby substantially inhibiting bacterial colonization on the inner surface of the package and the medical device.

4. The packaged medical device of Claim 3, wherein the antimicrobial agent source is an antimicrobial agent-loaded reservoir.

5. The packaged medical device of Claim 3, wherein the antimicrobial agent source is positioned within the package.

6. The packaged medical device of Claim 3, where the antimicrobial agent source is on the inner surface of the package.

7. The packaged medical device of Claim 3, wherein the antimicrobial agent source is integral with one or more packaging components in the package or the package.

8. The packaged medical device of Claim 3, wherein the medical device comprises one or more surfaces having an antimicrobial agent disposed thereon, said antimicrobial agent being selected from the group consisting of halogenated hydroxyl ethers, acyloxydiphenyl ethers, and combinations thereof; and a portion of each of the antimicrobial agent disposed on the medical device and the antimicrobial agent in the antimicrobial agent source is vapor transferred to the inner surface of the package, while an effective amount of the antimicrobial agent is retained on the medical device, when the package, the antimicrobial agent source and the medical device are subjected to said time, temperature and pressure conditions, thereby substantially inhibiting bacterial colonization on the inner surface of the package and the medical device.

9. A method for making an antimicrobial suture comprising the steps of:

positioning a suture and an antimicrobial agent source within a package, said antimicrobial agent being selected from the group consisting of halogenated hydroxyl ethers, acyloxydiphenyl ethers, and combinations thereof; and

subjecting the package, the suture and the antimicrobial agent source to time, temperature and pressure conditions sufficient to vapor transfer an effective amount of the antimicrobial agent from the antimicrobial agent source to the suture, thereby substantially inhibiting bacterial colonization on the suture.

10. The method of claim 9, where an effective amount of the antimicrobial agent is vapor transferred from the antimicrobial agent source to the inner surface of the package, thereby substantially inhibiting bacterial colonization on the package.

11. A method of making an antimicrobial medical device comprising the steps of:

positioning a medical device and an antimicrobial agent source within a package comprising an inner surface, said antimicrobial agent being selected from the group consisting of halogenated hydroxyl ethers, acyloxydiphenyl ethers, and combinations thereof within the package;

subjecting the package, the antimicrobial agent source and the medical device to time, temperature and pressure conditions sufficient to vapor transfer an effective amount of the antimicrobial agent from the antimicrobial agent source to the medical device, thereby substantially inhibiting bacterial colonization on the medical device.

12. The method of claim 11, where an effective amount of the antimicrobial agent is vapor transferred from the antimicrobial agent source to the inner surface of the package, thereby substantially inhibiting bacterial colonization on the package.

13. The method of Claim 12, wherein the antimicrobial agent source is an antimicrobial agent-loaded reservoir.

14. The method of Claim 12, wherein the antimicrobial agent source is positioned within the package.

15. The method of Claim 12, where the antimicrobial agent source is on the inner surface of the package.

16. The method of Claim 12, wherein the antimicrobial agent source is integral with one or more packaging components in the package or the package.

17. A method for making an antimicrobial medical device comprising the steps of:

exposing a medical device to an antimicrobial agent source; and

subjecting the medical device and the antimicrobial agent source to time, temperature and pressure conditions sufficient to vapor transfer an effective amount of the antimicrobial agent from the antimicrobial agent source to the medical device, thereby substantially inhibiting bacterial colonization on the medical device.

18. The method of Claim 17, wherein the time, temperature and pressure conditions sufficient to vapor transfer an effective amount of the antimicrobial agent from the antimicrobial agent source to the medical device are a pressure and a temperature sufficient to render a partial pressure for the antimicrobial agent that is the same as or greater than the partial pressure rendered under a temperature of 40°C and atmospheric pressure, and a period of time ranging from 4 to 8 hours.

19. An antimicrobial packaged medical device having an effective amount of antimicrobial agent for at least 6 months after sterilization and packaging, and before opening and use in a surgical procedure.